STATEMENT OF CONSIDERATIONS

REQUEST BY THE ALCOA, INC. (ALCOA) FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN PATENT RIGHTS UNDER DOE COOPERATIVE AGREEMENT NO. DE-FC07-00ID13900; W(A)-00-023; CH-1038

The Petitioner, ALCOA, has requested a waiver of domestic and foreign patent rights for all subject inventions arising under the above referenced cooperative agreement and subcontracts entered thereunder. The cooperative agreement is entitled, "Aluminum Carbothermic Technology (ACT)."

The objective of this cooperative agreement is to develop a carbothermic reduction process for aluminum production. During Phase I, Petitioner will evaluate process options for ACT and further its understanding of process parameters that affect the design of larger scale aluminum production systems. Petitioner will evaluate such developed systems in Phase II of this award. More specifically, Petitioner will determine system parameters that are critical to applying ACT in the aluminum smelting process, create physical and mathematical models of process components, design and operate electric arc furnace from bench scale to small-pilot, and conduct preliminary economic analysis of selected process options.

The total anticipated cost of the cooperative agreement, over the course of its two phases, is \$9.3 million, with Petitioner maintaining approximately 50% cost sharing during the course of the agreement. The waiver is contingent upon the Petitioner maintaining the above cost sharing percentage.

As noted in its waiver petition, Petitioner is a leader in the aluminum industry with more than 100 years of experience in aluminum smelting and materials processing and fabrication techniques for aluminum and advanced materials. Petitioner states that it has maintained a strong commitment to developing new aluminum smelting technology and has been at the forefront of advanced materials and processing technology. In the smelting technology, Petitioner has numerous publications, as well as many active U.S. patents, in its portfolio. Further, Petitioner represents that it invests over \$3 million a year in R&D related to the primary production of aluminum Considering Petitioner's technical expertise, established market position, and significant investment in this technology including sizable cost sharing in this cooperative agreement, it is reasonable to conclude that Petitioner will continue to develop and ultimately commercialize the technology and products which may arise from this cooperative agreement.

As set out above, Petitioner has also requested a waiver of patent rights in the subject inventions of its lower tier subcontractors, including but not limited to Elkem ASA Research. This waiver contemplates that the parties may allocate title or other rights to inventions among themselves as they deem appropriate. It is believed that this

approach will facilitate timely commercialization of the technology by furthering the establishment of business and technical relationships between the parties and providing a mechanism for obtaining meaningful cost sharing between the parties. Accordingly, title will be waived directly to a subcontractor upon mutual agreement of the Petitioner and the subcontractor. However, this waiver will only applies to such subcontractor(s) who provide a letter to DOE acknowledging their right to ask for a waiver and agreeing to the terms of this waiver. This waiver shall not impact the rights of those parties subject to Public Law 96-517, as amended, nor shall it grant any rights in inventions made by employees of the National Laboratories.

Petitioner has agreed that this waiver shall be subject to the march-in and preference for U.S. industry provisions, as well as the U.S. Government license, comparable to those set out in 35 U.S.C. 202-204. Further, Petitioner has agreed to the U.S. competitiveness provisions as attached to this Statement. In brief, Petitioner has agreed that products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States unless Petitioner can show to the satisfaction of the DOE that it is not commercially feasible to do so, and that Petitioner will not license, assign or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements. Additionally, Petitioner has agreed to contractor data licensing provisions as attached herein.

Referring to item 10 of the waiver petition, granting this waiver is not anticipated to have any adverse impact on competition. There are currently numerous designs, as well as competitors, in the field of aluminum production and smelting technologies. The success of this cooperative agreement can be expected to stimulate further investment and competition in this technology. Further, Petitioner has stated that it intends to make any patents obtained on waived inventions available for licensing to third parties.

Considering the foregoing, it is believed that granting this waiver will provide Petitioner with the necessary incentive to invest its resources in the commercialization of the results of the cooperative agreement in a fashion which will make the above technology available to the public in the shortest practicable time. Therefore, upon evaluation of the waiver petition and in view of the objectives and considerations set forth in 10 CFR Part 784, all of which have been considered, it is recommended that the

requested waiver be granted.

Daniel 19. Park
Assistant Chief Counsel
Intellectual Property Law Division

Date: 12/14/01

Based upon the foregoing Statement of Considerations and representations in the attached waiver petition, it is determined that the interests of the United States and the general public will best be served by a waiver of patent rights of the scope described above, and therefore the waiver is granted. This waiver shall not apply to any modification or extension of the cooperative agreement, where through such modification or extension, the purpose, scope or cost of the cooperative agreement has been substantially altered.

CONCURRENCE:

Donico Swink

Denise Swink
Deputy Assistant Secretary
Industrial Technologies
EE-20

Date: 1/31/02

APPROVAL:

Paul A. Gottlieb

Assistant General Counsel for Technology Transfer and Intellectual Property

Date: 1-31-02

WAIVER ACTION - ABSTRACT W(A)-00-023

CONTRACT SCOPE OF REQUESTOR

RATIONALE FOR DECISION

WORK

Development of aluminum carbothermic technology Alcoa, Inc.

50% cost sharing

(t) U.S. Competitiveness

The Contractor agrees that any products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States unless the Contractor can show to the satisfaction of the DOE that it is not commercially feasible to do so. In the event the DOE agrees to foreign manufacture, there will be a requirement that the Government's support of the technology be recognized in some appropriate manner, e.g., recoupment of the Government's investment, etc. The Contractor agrees that it will not license, assign or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements. Should the Contractor or other such entity receiving rights in the invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license, or other transfer of rights in the waived invention is suspended until approved in writing by the DOE.

Rights in Data - General (JUN 1987), is amended by adding paragraph (k) as follows:

- (k) <u>Contractor Licensing</u>. Except as may be otherwise specified in this contract as data not subject to this paragraph, the contractor agrees that upon written application by DOE, it will grant to the Government and responsible third parties, for purposes of practicing a subject of this contract, a nonexclusive license in any limited rights data or restricted rights software on terms and conditions reasonable under the circumstances including appropriate provisions for confidentiality; provided, however, the contractor shall not be obliged to license any such data if the contractor demonstrates to the satisfaction of the Secretary of Energy or designee that:
- (1) Such data are not essential to the manufacture or practice of hardware designed or fabricated, or processes developed, under this contract;
- (2) Such data, in the form of results obtained by their use, have a commercially competitive alternate available or readily introducible from one or more other sources;
- (3) Such data, in the form of results obtained by their use, are being supplied by the contractor or its licensees in sufficient quantity and at reasonable prices to satisfy market needs, or the contractor or its licensees have taken effective steps or within a reasonable time are expected to take effective steps to so supply such data in the form of results obtained by their use; or
- (4) Such data, in the form of results obtained by their use, can be furnished by another firm skilled in the art of manufacturing items or performing processes of the same general type and character necessary to achieve the contract results.